



Reading file

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, Ca. 94105-3901

January 18, 1994

John Inman, Forest Supervisor
Humboldt National Forest
976 Mountain City Highway
Elko, NV 89801

Dear Mr. Inman:

The U.S. Environmental Protection Agency (EPA) has reviewed the **Jerritt Canyon Mine Expansion Draft Environmental Impact Statement (DEIS), Elko County, Nevada**. Our comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementation Regulations, and §309 of the Clean Air Act.

The DEIS analyzes alternatives for a mining project which would involve excavation of four open pit mines and associated waste rock dumps, soil stockpiles, ore stockpiles, haul roads, and support facilities. The proposed project would disturb approximately 3,000 acres, most of which is public land. Alternatives to the proposed project were developed to address waste rock dump stability, revegetation potential, visual quality, stream flows, partial pit backfilling, and underground mining. The Forest Service Preferred Alternative, Alternative C, is different from the Proposed Alternative, submitted by the Independence Mining Company Inc.

We have appreciated the opportunity to review and comment on this DEIS in its preliminary stages. We believe that early coordination has facilitated the NEPA process. We do have concerns regarding the preferred alternative, however, based on its potential impacts to water quality and quantity, air quality, and vegetation. We recommend that the Final Environmental Impact Statement (FEIS) provide additional information regarding these issues as well as cumulative impacts and wetlands mitigation. We have rated this DEIS as EC-2 -- Environmental Concerns-Insufficient Information (see enclosed "Summary of Rating Definitions and Follow-Up Action"). Our specific comments are enclosed.

Please send a copy of the FEIS when it is officially filed with our Washington, D.C., office. If you have questions, please

call me at (415) 744-1574, or have your staff contact Jeanne Geselbracht at (415) 744-1576.

Sincerely,

A handwritten signature in black ink, appearing to read 'David J. Farrel', with a stylized flourish at the end.

David J. Farrel, Chief
Environmental Review Section
Office of Federal Activities

001761/93-460

Enclosures

cc: Captain Rod Gettng, U.S. Army Corps of Engineers
Rory Lamp, Nevada Division of Wildlife
Russ Fields, Nevada Division of Minerals
Llee Chapman, Elko County Commission
MaryJo Elpers, U.S. Fish & Wildlife Service

Cumulative Impacts

We note that the environmental assessment for the tailings impoundment on Bureau of Land Management land is incorporated by reference into this DEIS. However, it does not appear that the cumulative impact analysis in the DEIS addresses impacts associated with the impoundment. The second phase of the tailings facility will be constructed to accommodate tailings from the proposed project. Pursuant to 40 CFR 1502.4(a) and 1508.25(c), the FEIS should describe and discuss the cumulative impacts to environmental resources from the 30,000-ton facility as well as other activities in the general vicinity of the proposed mine project, including those outside of Forest Service jurisdiction.

Water Quality and Quantity

The FEIS should provide the results of the kinetic tests that have been conducted to determine acid generation potential of the various formations in the project vicinity. The FEIS should also discuss how waste rock with acid potential would be isolated or encapsulated in the waste rock dump so as to avoid contact with meteoric or underdrain waters. The FEIS should discuss how water from pits or the underdrain would be treated should it become contaminated as a result of acid rock generation.

The project would result in a decrease of runoff of greater than 1,000 acre-feet per year in Jerritt Creek and Burns Creek because the runoff would flow into open pits. Some of the diverted water is expected to percolate back to groundwater, and some would evaporate. The FEIS should estimate the loss of water to evaporation and describe the effects of runoff reduction on stream flows in Jerritt and Burns creeks, including impacts to beneficial uses and groundwater availability. If reductions would result in significant impacts, we recommend that the Forest Service seriously consider runoff/runoff diversion structures to channel water away from open pits and into these streams or purchase existing senior water rights in the area to replace depletions.

According to the DEIS (p. 4-33), if flow decreases and impairs use of Niagra Spring, appropriate mitigation would be implemented. Pursuant to 40 CFR §1502.14(f) and §1502.16(h), the FEIS should describe the mitigation measures that would be implemented. Functions and values of other springs and seeps could also be adversely affected by dewatering and burial under waste rock dumps. The FEIS should describe and commit to

mitigate all reductions in flow at other springs and seeps, should this occur as a result of dewatering.

The FEIS should indicate how many years it would take for springs and seeps within the three-mile cone of depression to recover after dewatering ceases.

The FEIS should discuss the potential for partial backfilling of the New Deep pit. The FEIS should also evaluate the potential for partial backfilling of the pit with waste rock with high acid potential so that it is submerged below the surface of the pit water. The potential effects of such disposal should be assessed.

Wetlands and Other Waters of the U.S.

We understand that the U.S. Army Corps of Engineers is a cooperating agency for this EIS and that this EIS will serve as the NEPA document for the Clean Water Act §404 permit. We recommend that the detailed wetland mitigation and plan be included or summarized in the FEIS.

Air Quality

According to the DEIS (p. 4-19), mitigation measures specified in the air quality permits for mine crushing and screening facilities would "ensure that the pollutant emissions would be within acceptable limits and would not cause unacceptable impacts upon the air quality of the area." No mitigation measures beyond those required by the permits are proposed for this project. However, it is unclear from the DEIS whether the permits include mitigation for fugitive emissions of PM10 (particulates smaller than ten microns) and whether or how fugitive emissions would be appropriately mitigated. We recommend that the Forest Service require the project sponsor to include measures to **minimize** fugitive emissions from blasting, crushing, haul roads, and other sources.

According to the DEIS (p. 4-19), impacts to air quality would be considered significant if the project would cause or contribute to exceedences of Prevention of Significant Deterioration (PSD) increments. However, the document does not describe the project's potential direct or cumulative impacts to PSD increments, so it cannot be determined whether it would contribute to exceedences of PSD increment. The FEIS should describe how project emissions would affect PSD increments.

The proposed project includes visual monitoring of fugitive dust emissions from haul roads and crushing activities (DEIS, p. 2-

42). However, it is unclear what purpose this monitoring would serve because specific information regarding action levels and contingency measures are not provided. The FEIS should discuss how the monitoring would be conducted and identify the baseline concentration in the project vicinity, the visual standard that would apply, the criteria that would be used to determine exceedence of the standard, and the contingency measures that would be taken should the standard be exceeded.

Vegetation

According to the DEIS, 662 acres of aspen community would be directly affected by the preferred alternative, and greater than 1,200 acres of aspen community would be cumulatively affected. This represents approximately 20 percent of the this vegetation community in the Independence Mountains and appears to be a significant impact. We encourage the Forest Service to mitigate for as much of this loss as possible in order to protect the ecological diversity of the area. The FEIS should indicate how many acres of aspen community will be regenerated following mine closure and how mitigation/regeneration would be accomplished.

According to the DEIS (p. 2-8), approximately 194 acres of disturbance designated for final reclamation at existing Jerritt Canyon operations have been reseeded. The FEIS should describe the success of the revegetation effort thus far and any results that can be fed back into the reclamation plan to improve the success of future revegetation efforts.